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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,177	06/25/2003	Dallas B. Wynne	10739.18.66	5200

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EXAMINER

VASUDEVA, AJAY

ART UNIT PAPER NUMBER

3617

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/607,177	Applicant(s) WYNNE ET AL.	
	Examiner Ajay Vasudeva	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-21, 26-29, 31-33 and 35 is/are rejected.
- 7) ☒ Claim(s) 22-25 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 102***

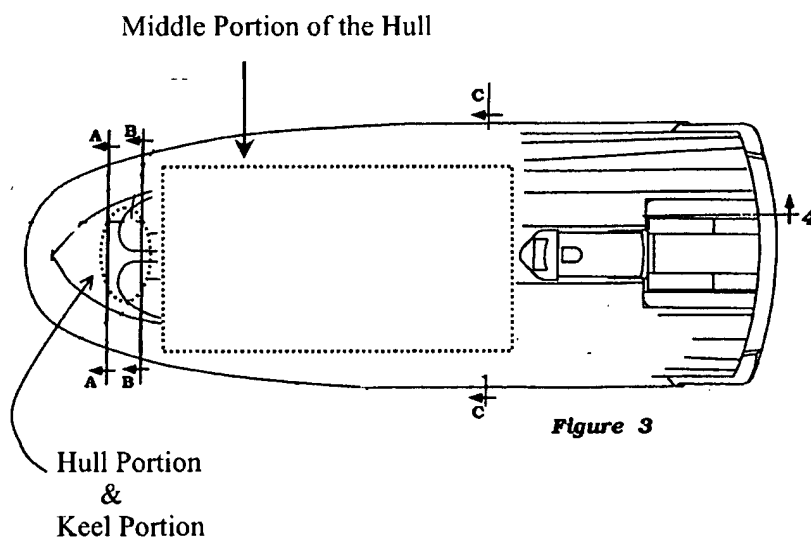
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

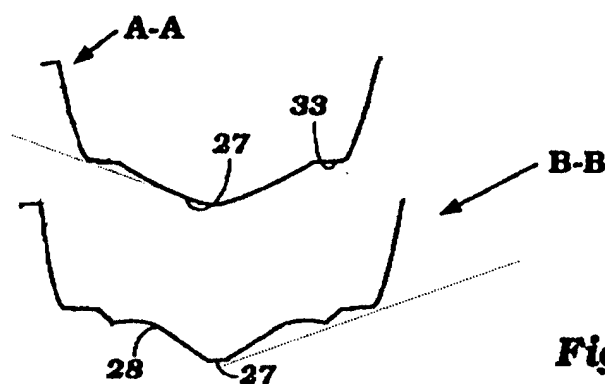
2. Claims 8, 9, 11, 12 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hattori et al. (US 5,390,621 A).

Hattori et al. ('621) shows a personal watercraft with a hull, and a small hull portion in a forward location of the hull, as shown below between section lines A and B. A keel portion [27] extends from the bow over the middle portion of the hull, as shown by dotted lines below. The keel section – *which is only a smaller front segment of the keel portion and located proximate the bow* -- has concave hull sections disposed on each side of the keel section. The middle portion of the hull is defined by the area disposed between the section lines B and C, as shown below with a dotted rectangular area.



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A keel angle, defined by the angle formed between the two opposing keel surfaces, is smaller at the rear part of the keel section than at the front part of the keel section (see figures 3 and 5). Similarly, the slope of keel opposing walls increases from front to the rear section in the keel section of the keel portion. The concave hull sections disposed on each side of the keel define the respective keel troughs, which increase in depth from front to the rear of the watercraft.

**Figure 5**

Re claims 11 and 12, the keel portion lies within a 10 percent length on a front side of the middle portion of the hull, and is therefore also within a 15 percent length.

Re claim 35, the keel section of the keel portion is V-shaped.

3. Claims 8-12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hattori et al. (US 5,255,626 A).

Hattori et al. ('626) shows a personal watercraft with a hull portion that extends from section line 3 to a location forward of section line 5 (see figure 2). A center keel portion [54] extends the length of the hull portion. A second keel section extends substantially the length of the center keel portion and has troughs disposed on each side of the keel section. A keel angle, defined by the angle formed between the two opposing keel surfaces, is smaller at the rear part

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of the keel portion than at the front part of the keel portion (see figures 3, 4 and 5). Similarly, the slope of keel opposing walls increases from front to the rear portion of the keel. The trough increases in depth from front to the rear of the watercraft. The keel section extends along substantially the middle third of the hull length.

4. Claims 17-21, 26-29 and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitehead (US 4,609,360 A).

Whitehead shows a watercraft (fig. 1, 2 and 10) with a V-shaped center keel portion extending over at least the middle third of the length of the hull. The keel portion has keel troughs on either side that increase in depth from front to the rear of the watercraft. The keel portion clearly has a section length of at least 3 feet.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,255,626 A).

Hattori et al. ('626) shows the personal watercraft having a keel, and troughs disposed on each side of the keel. However, it does not show the keel beginning about one foot forward of the jet pump and having a length of at least two feet (claim 13). Further, it does not show the

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keel as having a maximum downward slope three feet rearward to the hull front, which is less than the slope at a location three feet or four feet forward the hull rear (claims 14 and 15).

It would have been obvious for one skilled in the art at the time of the invention to have spaced the keel beginning at least one foot forward of the jet pump. Having such sufficient space would have allowed one to properly accommodate the jet pump housing within the hull structure.

Further, the maximum downward slope three feet rearward to the hull front being less than the slope at a location three feet or four feet forward the hull rear of the keel portion is considered a design choice, and is a function of the hull length.

As explained above, if the length of the boat hull was substantially longer than the one shown by Hattori et al. ('626), it would have been obvious for one skilled in the art at the time of the invention to make the keel portion similarly long in order to maintain the hull proportions. Having a longer hull length would have increased the stability of the watercraft.

In such a case, the tapering keel would have had a maximum downward slope three feet rearward to the hull front being lesser than the slope at a location three feet or four feet forward the hull rear of the keel portion.

Allowable Subject Matter

7. Claims 1-7 are allowed.
8. Claims 22-25 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to rejections based on Hattori et al. ('621) and Hattori et al. ('626) have been considered but are moot in view of the new ground(s) of rejection.

Argument Re Hattori et al. ('626): Applicant argues that the keel portion extends rearward of the water inlet since it remains present in the cross section of fig 6, and therefore does not terminate forward of the water inlet

Response: The water inlet is located on the longitudinal centerline of the hull, which would obviously interrupt the keel portion from extending the length of the hull. Fig 6 shows a ride plate, which is an extremely well known component of personal watercraft, and does not form a part of the keel portion.

Argument Re Hattori et al. ('621): Applicant argues that there is no evidence that the keel portion terminates forward of the water inlet, and fig. 3 shows that the portion 27 extends rearward of the water inlet.

Response: Fig 3 shows that it is the curved portion 28 that extends beyond the water inlet, and not the keel portion as being argued. The curved portion 28 only flanks the keel portion. The location of the water inlet on the longitudinal centerline of the hull would clearly prevent the keel portion from extending beyond the water inlet.

10. Applicant's arguments with respect to claims 17-21, 26-29 and 31-33 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

11. The prior art made of record in the attached PTO form 892, but not yet relied upon, is considered pertinent to applicant's disclosure.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AV

Ajay Vasudeva
Examiner
Art Unit 3617


AJAY VASUDEVA 2/10/06
PATENT EXAMINER